

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) ~~An~~ A method of manufacturing an optical module comprising
[:] a column-shaped mounting member having a through hole extending in the direction of the
central axis thereof and having a mounting surface formed by partially incising a part of said
mounting member so as to expose the interior surface of said through hole; an optical fiber
inserted in said through hole and secured in a configuration such that said optical fiber protrudes
with a specified length onto said mounting surface, ~~a Bragg diffraction grating being formed in
such protruding part of said optical fiber on said mounting surface after such securing of said
optical fiber~~; and an optical semiconductor device provided on the mounting surface and
optically connected to an end of the optical fiber, the method comprising:

forming a Bragg diffraction grating in the protruding part of the optical fiber on the
mounting surfaces after the optical fiber is secured.

2. (Canceled)

3. (Currently amended) ~~An optical module as defined in claim 1,~~ The method of claim 1
wherein said optical semiconductor device is a semiconductor optical amplifier.

4. (Withdrawn) An optical module as defined in claim 1, wherein said optical
semiconductor device is a photodiode.

5. (Withdrawn) An optical module as defined in claim 1, wherein
said mounting surface includes a first area and a second area, both being arranged so as to
extend in the same direction as a groove that is formed extending in continuation with, and in the

same direction as, said through hole; said protruding part where said Bragg diffraction grating is formed in said optical fiber is located in said first area; and wherein

said optical module further comprises:

a semiconductor light emitting device provided in said second area of said mounting surface so as to face an end of said optical fiber and optically connected to said end of said optical fiber;

an optical device capable of reflecting incident light of a specified wavelength range and transmitting light of another specified wavelength range, said optical device being positioned between the part of said optical fiber where said Bragg diffraction grating is formed and the part of said optical fiber which is inserted in said through hole so that said optical device is optically connected to both of said parts of said optical fiber; and

a semiconductor optical receiver device provided in said first area of said mounting surface and optically connected to said optical device.

6. (Currently amended) ~~An optical module as defined in claim 1,~~ The method of claim 1 wherein said mounting member is made of a ceramic material.

7. (Currently amended) ~~An optical module as defined in claim 6,~~ The method of claim 6 wherein said ceramic material is either alumina or zirconia.

8. (Withdrawn) An optical module as defined in claim 1, wherein a lead frame is also provided so as to support said mounting member, said lead frame being electrically connected to said optical semiconductor device.

9. (Withdrawn) An optical module as defined in claim 1, wherein a resin sealing body is also provided to envelope said optical semiconductor device and said protruding part of said optical fiber on said mounting surface.

10. (Currently amended) ~~An~~ A method of manufacturing an optical module comprising
[[:]] a column-shaped mounting member having a through hole extending in the direction of the
central axis thereof and having a mounting surface formed by partially incising a part of said
mounting member so as to expose the interior surface of said through hole; and an optical fiber
inserted in said through hole and secured in a configuration such that said optical fiber protrudes
with a specified length onto said mounting surface, ~~a Bragg diffraction grating being formed in
such protruding part of said optical fiber on said mounting surface after such securing of said
optical fiber~~, the method comprising:

forming a Bragg diffraction grating in the protruding part of the optical fiber on the
mounting surface after securing the optical fiber.

11. (Canceled)

12. (Currently amended) ~~An~~ A method of manufacturing an optical module comprising
[[:]] a mounting member having a first section wherein a through hole is formed extending along
the central axis thereof, and a second section wherein a groove is formed extending in
continuation with, and in the same direction as, said through hole; and an optical fiber inserted in
said through hole and secured in a configuration such that said optical fiber protrudes with a
specified length into said groove, ~~a Bragg diffraction grating being formed in such protruding
part of said optical fiber after such securing of said optical fiber~~, the method comprising:

forming a Bragg diffraction grating in the protruding part of the optical fiber on the
mounting surface after securing the optical fiber.